HANDBOOK OF PHONOLOGICAL DATA
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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015 Angas

015 01 p-aspirated
[p][60]
(allo,free)
[p-unreleased][61]
(free)

015 02 b

015 03 b-implosive

015 04 t-aspirated
[t][60]
(allo,free)
[t-unreleased][61]
(free)

015 05 d

015 06 d-implosive

015 07 c-aspirated

015 08 j

015 09 j-implosive

015 10 k-aspirated
[k][60]
(allo,free)
[k-unreleased][61]
(free)

015 11 g

015 12 t/s-hacek-aspirated

015 13 d/z-hacek

015 14 f

015 15 v

015 16 s

015 Angas

17 z

18 s-hacek

19 z-hacek

20 gamma

21 m
[m-voiceless][01 66]

22 n
[n-voiceless][01 66]

23 n-palatal

24 eng
[eng-voiceless][66]

25 l
[l-voiceless][66]

26 r-trill
[r-flap][67]
[r-trill-voiceless][01 66]

27 glottal stop[31]
(transitional)

28 h

51 i-long
*[iota]

52 iota-backed
[i-bar][04 33 68]
(allo,transitional)
[iota/iota-glide-backed][69]
[iota][70 71 72]
*/i-long/

015 Angas

54 e

55 epsilon
[epsilon/epsilon-dot-glide][7

56 iota-bar-long[04]

57 a[04]

58 a-long[04]

59 u
[upsilon-fronted][74]

60 u-long[34]
(limited)

61 o
[o-open][75]

62 yod

63 w

64 epsilon-dot/iota-glide[35]
(limited)

81 high
[high-falling][76]

82 mid[77]
(tag(+),allo)
*/low/
[mid-rising][78]

83 low
*[mid]
[low-rising][79]

015 $a Angas $d Chadic $e SE Nigeria (Benue-Plateau) $f 130,000 $g Merritt Ruhlen $g Ken Stallcup (review)$g Jim Lorentz (review)

015 $a Burquest, D.A. $b 1971 $c A Preliminary Study of Angas Phonology $f (Studies in Nigerian Languages. No. 1) $g Zaria: Institute of Linguistics $q informants:4 $r 2 years

015 $a **INTONATION** $A "Statement [is] characterized by...general downdrifting throughout the phonological sentence.... Interrogative [is] characterized by...general downdrifting through the phonological sentence...[and] final falling pitch which will occur unless the final syllable is low in tone, in which case the tone can be falling or slightly rising allophonically."

015 $a **LABIALIZED CONSONANTS** $A "Labialization has wide distribution, occurring with many consonantal phonemes. Phonetically it is manifested by lip rounding simultaneous with the articulation of the consonantal phoneme with which it occurs, with a labialized offglide." (p.45) Analyzed in the Archive as cluster of consonant plus /w/.

015 $a **LONG CONSONANTS** $A "Whenever the clustering consonants are identical, whether they cluster within the phonological word or across the phonological word boundary, the phonetic result is a lengthening of the consonant, not a rearticulation." (p.27)

015 $a **PALATAL CONSONANTS** $A In Burquest's analysis there are no palatal stops. There are palatalized occurrences of /k-aspirated, g, eng, glottal stop/ which are [k-aspirated.yod,

g.yod, n-palatal, j-implosive] respectively. They have been reanalyzed as unit phonemes because (1) /k-aspirated/ is described as having a palatal allophone before /yod/ but not before /i-long/, (2) /j-implosive/ seems to be an unlikely allophone of /glottal stop/, and /glottal stop/ is probably not phonemic, (3) most phonemes in the language can be labialized. Bilabials can be either labialized or palatalized. According to Burquest /k-aspirated, eng, glottal stop/ can be simultaneously labialized and palatalized, giving e.g. [glottal stop-labialized-palatalized]. [j-implosive-labialized] fits the pattern of the language better. [KS]

015 $a **PALATALIZED CONSONANTS** $A "Palatalization is very restricted in its distribution [i.e. to bilabials and to the series of stops which are called palatal here-KS]. Phonetically it is manifested by tongue movement toward the palate simultaneous with the articulation of the consonantal phoneme with which it occurs, with a palatalized offglide." (p.45)

015 $a **PRENASALIZED CONSONANTS** $A Prenasalized consonants are very common. It seems best to analize them as clusters of nasal plus consonant.

015 $a **STRESS** $A "Each phonological word has one and only one stress. The factors which condition stress have not yet been fully studied. It is clear, however, that stress is neither phonemic nor used at all in connection with emphasis." (p.9)

015 $a **SYLLABLE** $A (C)(C)CV(:)(C)(C) $A Burquest analyzes palatalized, labialized, prenasalized, and prenasalized-labialized consonants as units. However, with the exception of the palatalized consonants, the different combinations are quite productive, and are much more conveniently analyzed as clusters. [JHC] $A initial C: any C $A initial CC: nasal + homorganic C (but note [n] before [w, f]); C + /w/ $A final C: /p-aspirated, t-aspirated, k-aspirated, m, n, eng, s, s-hacek, l, r-trill/ $A final CC: /l, r-trill/ + /m, p-aspirated, eng, k-aspirated/ (p.10-11, 41ff)

015 $a **TONE** $A domain of tone: syllable

015 01 $A [m-voiceless, n-voiceless, r-trill-voiceless] occur "with voiced onset." (p.37)

015 04 $A [i-bar, iota-bar-long, a, a-long] are described as "central...fronted." (p.40)

015 31 $A The phonemic status of /glottal stop/ is questionable. It occurs "in the syllable onset slot" (p.39) if no other consonant is there. The only vowel initial syllables in the language are suffixes. The only examples of /glottal stop/ that are not word initial are reduplicated forms. Thus, while /glottal stop/ is in contrast with all consonants in initial position, it is not in contrast with zero. [KS]

015 33 $A "Between the clustering consonantal phonemes [syllable internal /l/ or /r-trill/ followed by /m/, /p-aspirated/, /eng/ or /k-aspirated/-[JL]] there is often a non-phonemic open transition (phonetically a short high central vocoid [i-bar]), but it is rarely heard in the clusters /l.m/ and /l.eng/." (p.11)

015 34 $A /u-long/ apparently occurs only as a marker of completive aspect in conjunction with falling tone. (p.12, 13)

015 35 $A "There is a small group of words which contain a complex syllable.... Because there are no non-ambiguous cases of vowel plus vowel in the syllable nucleus, nor of /yod/ in the coda slot of the syllable, these instances of /epsilon-dot/iota-glide/ appear to be best interpreted as unit phonemes." (p.13) /epsilon-dot/iota-glide/ occurs "only in the syllable-peak slot of a CV syllable." (p.40)

015 60 $A The unaspirated stops occur "in the coda slot of non-final syllables, and in free fluctuation with [aspirated stops] in the onset slot of unstressed syllables." (p.37) (/c-aspirated, t/s-hacek-aspirated/ do not occur here.)

015 61 $A The unreleased allophones of stops occur "in free fluctuation with [aspirated allophones] in the coda slot of utterance-final syllables." (p.37) (The only stops found in this position are /p-aspirated, t-aspirated, k-aspirated/.)

015 66 $A /m, n, eng, l, r-trill/ are voiceless "only in the coda slot of utterance-final syllables." (p.37)

015 67 $A /r-trill/ is realized as [r-flap] "intervocalically." (p.38)

015 68 $A /iota-backed/ is realized as [i-bar] "in the syllable-peak slot in a velar environment or before /r-trill/, but not after a palatal." (p.40)

015 69 $A /iota-backed/ is realized as [iota/iota-glide-backed] "in the syllable peak slot following a palatal and before /r-trill/ or a velar." (p.41)

015 70 $A As an allophone of /i-long/, [iota] "occurs only in the syllable-peak slot before /r-trill/." (p.39)

015 71 $A As an allophone of /iota-backed/ [iota] "occurs only in the syllable peak slot following a palatal but not before /r-trill/ or a velar." (p.39)

015 72 $A [iota] also occurs as an echo vowel utterance finally after stressed consonant final syllables. (p.8)

015 73 $A /epsilon/ is realized as [epsilon/epsilon-dot-glide] "in syllable peak slot before a velar."

015 74 $A /u/ is realized as [upsilon-fronted] "in the syllable-peak slot after labialization." (p.40)

015 75 $A /o/ is realized as [o-open] "in the syllable-peak slot in a velar environment or following labialization." (p.40)

015 76 $A "There are a few instances of falling tone, occurring as an allotone of /high/ on certain morphemes in certain environments. (p.18)

015 77 $A /low/ is raised to [mid] between /mid/ and /high/ tone.

015 78 $A /mid/ is realized as [mid-rising] sentence finally after /low/ tone, or between /low/ and a sentence final /high/ tone. (p.17, 18)

015 79 $A /low/ is realized as [low-rising] "at the final border of the phonological sentence." (p.8)